

AMENDMENTS TO THE CLAIMS

1.-27. (Canceled)

28. (Currently amended) A method for the treatment or prophylaxis of a B-cell disorder in a subject, the method comprising administering to the subject an effective amount of an anti-LMA antibody that specifically binds LMA and does not bind light chain associated with a heavy chain, to inhibit the growth of, or kill, lymphoid cells in the subject.

29. (Previously presented) A method according to claim 28 wherein the B-cell disorder is a lymphoproliferative disorder selected from the group consisting of multiple myeloma, B cell lymphoma and macroglobulinemia.

30. (Previously presented) A method according to claim 28 wherein the B-cell disorder is multiple myeloma.

31. (Previously presented) A method according to claim 28 wherein the anti-LMA antibody is conjugated to a cytotoxic moiety or biological modifier.

32. (Previously presented) A method according to claim 34 wherein the cytotoxic moiety is a toxin, a chemotherapeutic agent, or a radioactive agent.

33. (Currently amended) A method for inhibiting the growth of or killing lymphoid cells in a subject, the method comprising administering to the subject an LMA ligand which

(a) specifically binds LMA,

(b) does not bind light chain associated with a heavy chain, and

(c) is conjugated to a cytotoxic moiety or biological modifier to form an LMA ligand conjugate,

~~under conditions sufficient for the binding of the~~ such that the LMA ligand conjugate binds to the lymphoid cells to inhibit the growth of, or to kill, the cells.

34. (Previously presented) A method according to claim 33 wherein the LMA ligand is anti-LMA antibody.

35. (Previously presented) A method according to claim 33 wherein the cytotoxic moiety is a toxin, a chemotherapeutic agent, or a radioactive agent.

36. (Previously presented) A method according to claim 28 which further comprises the step of treating the subject to reduce the level of free lambda light chains present in the fluid of the subject prior to administration of the anti-LMA antibody or LMA ligand conjugate.

37. (Previously presented) A method according to claim 36 wherein the level of free light chains present in the serum of the subject is reduced by chemotherapy or plasmapheresis.

38. (Currently amended) A method for autologous hematopoietic cell transplantation in a subject, the method comprising

(i) removing a hematopoietic progenitor cell population from the subject,

(ii) treating the cell population with an anti-LMA antibody or LMA ligand conjugate, wherein the anti-LMA antibody or LMA ligand conjugate specifically binds LMA and does not bind light chain associated with a heavy chain, and

(iii) transplanting the treated cell population from step (ii) into the subject.

39. (Previously presented) A method according to claim 38 which further comprises intravenous infusion of anti-LMA antibody or LMA ligand conjugate into the subject.

40. (Currently amended) A method for localizing lymphoid cells in a subject, the method comprising administering to the subject an anti-LMA antibody or LMA ligand conjugate, allowing the anti-LMA antibody or anti-LMA ligand conjugate to bind to cells within the subject, and determining the location of the anti-LMA antibody or anti-LMA ligand conjugate within the subject, wherein the anti-LMA antibody or LMA ligand

conjugate specifically binds LMA and does not bind light chain associated with a heavy chain.

41. (Currently amended) A method according to claim 40 wherein the antibody or ligand conjugate is detectably labeled.

42. (Previously presented) A method according to claim 28 wherein the anti-LMA antibody is a chimeric antibody or a humanised antibody.

43. (Currently amended) An anti-LMA antibody conjugated to a cytotoxic moiety or a biological modifier, wherein the anti-LMA antibody specifically binds LMA and does not bind light chain associated with a heavy chain.

44. (Previously presented) An anti-LMA antibody according to claim 43 wherein the cytotoxic moiety is a toxin, a chemotherapeutic agent, or a radioactive agent.

45. (Previously presented) An anti-LMA antibody according to claim 43 wherein the cytotoxic moiety is a nucleic acid molecule encoding a cytotoxic polypeptide.

46. (Previously presented) An anti-LMA antibody according to claim 43 wherein the biological response modifier is a lymphokine, a cytokine or an interferon.

47. (Currently amended) An anti-LMA antibody labeled with a detectable moiety, wherein the anti-LMA antibody specifically binds LMA and does not bind light chain associated with a heavy chain.

48. (Currently amended) A pharmaceutical composition comprising an anti-LMA antibody or an LMA ~~antigen~~ligand conjugate and a pharmaceutically-acceptable carrier, diluent, or excipient, wherein the anti-LMA antibody or LMA ligand conjugate specifically binds LMA and does not bind light chain associated with a heavy chain.